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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,392	01/19/2001	Masato Nakajima	24500	7547

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EXAMINER

DASTOURI, MEHRDAD

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 10/22/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,392

Applicant(s)

NAKAJIMA ET AL.

Examiner

Mehrdad Dastouri

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-13 are objected to because of the following informalities:

Independent Claims 1 and 9, Line 1, recite "a document modification apparatus" while Claims 2-8 and 12 (dependent on Claim 1) and Claims 10, 11 and 13 (dependent on Claim 9), recite "a document modification means".

Appropriate correction to correct this discrepancy is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The phrase "such as" recited in Line 4 of Claim 3, renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claim 4 depends on Claim 3.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-5, 7 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kamada et al (U.S. 6,466,694).

Regarding Claim 1, Kamada et al disclose a document modification apparatus for modifying image data read by image input means, comprising:

region extracting means for extracting a plurality of regions from the image data, each being a unit to be modified (Figure 1A, Region Identifying Unit 2; Figure 2, Extracting Unit 15, Identifying Unit 11; Column 5, Lines 1-46; Column 6, Lines 49-61);

region selection means for selecting target regions to be modified from the plurality of regions through an operator (Abstract; Figures 2-4; Column 5, Lines 31-40; Column 6, Lines 62-67, Column 7, Lines 1-10; Column 7, Lines 41-67, Column 8, Lines 1-11; Column 10, Lines 10-18);

modification specifying means for specifying kinds of modifications for the target regions selected by the region selection means through the operator (Figures 2-4; Column 7, Lines 41-67, Column 8, Lines 1-11); and

modification image making means for making a modified image, based on the kinds of the modifications, in the regions in the image data selected by the region selection means, specified by the modification specifying means (Figures 2-4; Column 9, Lines 36-67, Column 10, Lines 1-18).

Regarding Claim 2, Kamada et al further disclose a document modification apparatus according to Claim 1, wherein the region extracting means extracts rectangle regions as the target regions to be modified, and the region extracting means comprise region attribute judgment means for judging an attribute for each rectangle region

(Figures 2, 5-8; Column 6, Lines 49-67, Column 7, Lines 1-10; Column 10, Lines 25-67, Column 11, Lines 1-24).

Regarding Claim 3, Kamada et al further disclose a document modification apparatus according to Claim 2, wherein the region attribute judgment means judges whether an attribute of each rectangle region that has been extracted is one of attributes "character", "photograph", "table", "ruled line" and "frame" (Figures 2, 5-8; Column 6, Lines 49-67, Column 7, Lines 1-10; Column 10, Lines 25-67, Column 11, Lines 1-24).

Regarding Claim 4, Kamada et al further disclose a document modification apparatus according to Claim 3, wherein the region extracting means integrates the rectangle region, whose attribute has been judged as "character" by the region attribute judgment means, per line and paragraph (Figures 8, 10, 19-26, 34 and 35; Column 14, Lines 1-14), and

The region selection means selects the target region to be modified per line and paragraph through the operator (Figures 22-26; Column 14, Lines 15-67, Column 15, Lines 1-25).

Regarding Claim 5, Kamada et al further disclose a document modification apparatus according to Claim 1, wherein the region extracting means displays on a display screen the rectangle regions extracted by the region extracting means with the image data read by the image input means, and selects whether each rectangle region on the display screen is modified or not through the operator (Figures 22-26; Column 14, Lines 15-67, Column 15, Lines 1-25).

Regarding Claim 7, Kamada et al further disclose a document modification apparatus according to Claim 1, wherein the modification image making means comprises memory means for storing position information of the selected rectangle regions by the region selection means and the modification information regarding the kinds of the modifications specified by the modification specifying means (Figure 36, Memory 62; Column 6, Lines 62-67, Column 7, Lines 1-25), and

The modification image making means performs the modification for the image data read by the image input means based on the position information and the modification stored in the memory means (Figure 36, Memory 62; Column 6, Lines 62-67, Column 7, Lines 1-25)

With regards to Claim 14, arguments analogous to those presented for Claim 1 are applicable to Claim 14. Kamada et al further disclose image output means for outputting the modified image obtained by the document modification apparatus (Figure 3A, Displaying Unit 25).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamada et al (U.S. 6,466,694) in view of Koga et al (U.S. 5,717,794).

Kamada et al do not explicitly disclose further limitations of Claim 6.

Koga et al disclose a document recognition and editing system, comprising a modification means which displays an at-a-glance menu showing the information regarding the kinds of modifications, and selects the modification, to be applied to the selected rectangle regions, from the kinds of the modifications shown in the at-a-glance menu through the operator (Figures 15 and 17; Column 15, lines 12-20; Column 16, Lines 13-67).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Kamada et al invention according to the teachings of Koga et al to implement further limitations recited in Claim 6 because it will expedite document modification process and will minimize processing error.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamada et al (U.S. 6,466,694) in view of Tabata et al (U.S. 4,785,296).

Kamada et al do not explicitly disclose further limitations of Claim 8.

Tabata et al disclose a document modification method and system for displaying image data comprising resolution conversion means for changing a resolution of the input image data to a reduced image (Abstract; Figure 1, Reduced image 12); and display means for displaying the reduced image obtained by the resolution conversion means with a rectangle region extracted by the region extraction means (Abstract; Figure 1, Rectangular Block 13; Column 2, Lines 63-68, Column 3, Lines 1-7).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Kamada et al invention according to the teachings of Tabata et al to implement further limitations recited in Claim 8 because it will provide

efficient and economic interactive processing of a complex document (Tabata et al; Column 1, Lines 54-58).

9. Claims 9-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamada et al (U.S. 6,466,694) in view of Kodaira et al (U.S. 6,043,823).

With regards to Claim 9, arguments analogous to those presented for Claim 1 are applicable to Claim 9. Kamada et al do not explicitly disclose automatic modification means for automatic selection and modification of the selected regions.

Kodaira et al disclose a document processing system which can automatically select and modify regions of a document (Column 2, Lines 26-41; Column 13, Lines 27-54).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Kamada et al invention according to the teachings of Kodaira et al to perform automatic selection and modification of the selected regions because it will expedite document modification process, minimize processing error and eliminate the burden of time-consuming manual modification by the user.

With regards to Claim 10, arguments analogous to those presented for Claim 2 are applicable to Claim 10.

With regards to Claim 11, arguments analogous to those presented for Claim 3 are applicable to Claim 11.

With regards to Claim 12, Kodaira et al further disclose the document modification apparatus according to Claim 1, wherein the image input means converts

the input image data to binary image data (Figure 3, Step ST301, Binarization Processing).

With regards to Claim 13, arguments analogous to those presented for Claim 12 are applicable to Claim 13.

With regards to Claim 15, arguments analogous to those presented for Claim 9 are applicable to Claim 15. Kamada et al further disclose image output means for outputting the modified image obtained by the document modification apparatus (Figure 3A, Displaying Unit 25).

Other prior art cited

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,257,328 to Shimizu is cited for document recognition device.

U.S. Patent 5,231,579 to Tsuchiya et al is cited for method and system for displaying and processing image of a form document.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438.

The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Customer Service Office whose telephone number is (703) 306-0377.

MEHRDAD DASTOURI
PRIMARY EXAMINER

Mehrdad Dastouri

Mehrdad Dastouri
Primary Examiner
Group Art Unit 2623
October 16, 2003